# **16-Port Fast Ethernet Switch**

# **User's Guide**

## FCC REGULATORY STATEMENTS

#### Part15, Class B

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interface, and
- 2. This device must accept any interface received, including interface that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- **d** Changes or modifications not expressly approved by party responsible for compliance could void the user authority to operate the equipment.

## **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## INTRODUCTION

The 16-Port Fast Ethernet 10/100Mbps N-Way Switch provides you a flexible, reliable, and affordable solution of the Ethernet network. It comes with sixteen 10BASE-T /100BASE-TX ports. The 16-Port Fast Ethernet 10/100Mbps N-Way Switch is able to operate in both half and full-duplex modes. Each port delivers up to 200Mbps throughput in full duplex mode.

The 16-Port Fast Ethernet 10/100Mbps N-Way Switch also processes a N-Way autonegotiation function, which automatically adjusts the device for optimum operation; "Store-and-Forward" architecture filters to eliminate error packets and improve efficiency. Plus, the auto-MDI/MDIX technology provides the convenience of using a straight through or a crossover Ethernet cable and you will be connected with any other devices. Moreover, the built-in Universal Power Supply allows you to install the switch easily without the external power adapter.

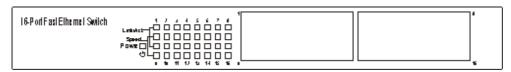
## **Key Features**

- Complies with IEEE 802.3 10Base-T and IEEE 802.3u 100Base-TX standards
- "Store and Forward" architecture filters
- IEEE 802.3x or Back Pressure (HDX) Flow Control
- 16 x RJ45 STP/UTP Ethernet ports on front panel
- 4K MAC Address table supported
- 10/100Mbps auto-detection on Full or Half Duplex
- Each Ethernet port supports Auto-MDI/MDIX (auto-crossover) technology
- Provides non-blocking and Head-of-line blocking forwarding prevention
- 256KB on-chip buffer
- Built in Universal Power Supply: 90~264V
- Emission certification: FCC Class B, CE mark

## PARTS NAMES AND FUNCTIONS



## Front Panel: LED Indicators



| LED      | Color | Status                         |                              |  |
|----------|-------|--------------------------------|------------------------------|--|
|          |       | Solid                          | Flashing                     |  |
| Power    | Green | Power is on.                   | N/A                          |  |
| LINK/ACT | Green | Connection is detected         | Sending or Receiving packets |  |
| Speed    | Green | ON for 100Mbps, OFF for 10Mbps | N/A                          |  |

## **Rear Panel: Power Port**



## HARDWARE INSTALLATION

The switch is considered as a "plug and play" network device and requires no special setup procedures. Connect the power cord and cables correctly and you are ready to go.

#### Switch installation

- 1. Put the switch on the appropriate location. When you install the switch, there are two things needed to be considered:
  - Location: Your switch should be located in a place that is central to your home/office space and allows all computers and networked devices connected to your switch.
  - **Power:** Remember to locate your switch near electrical outlet.
- 2. Power on the switch by connecting the power cord.
- 3. Verify if the power (POWER) LED is on. If the POWER LED does not light up, check the power cord and power outlet to verify its connection. If it still remains unlit, please contact your dealer for support.

#### **Ethernet Port Connection**

Connect user machines, servers, another switch, hub, or any other devices to the Ethernet ports on this switch with either straight through or crossover Ethernet cables.

## **SPECIFICATION**

|   | I  |                     |  |  |
|---|--|---------------------|--|--|
|   | IEEE 802.3 10Base-T Ethernet                   |                     |  |  |
| Standards   | IEEE 802.3u 100Base-TX Fast Ethernet           |                     |  |  |
|   | IEEE802.3x Flow Control                        |                     |  |  |
| Protocol  | CSMA/CD  |                     |  |  |
| Ports   | Sixteen 10/100Mbps RJ-45 ports support auto-MD |                     |  |  |
| Switching Scheme  | Store-and-Forward                              |                     |  |  |
|   | Full Duplex: IEEE802.3x                        |                     |  |  |
| Flow control  | Half Duplex: Back Pressure                     |                     |  |  |
|   | UTP Category 3 or better (10Base-T)            |                     |  |  |
| Cabling type  | UTP Category 5 or better (100Base-TX)          |                     |  |  |
|   | 10Mbps or 100Mbps (Half Duplex)                |                     |  |  |
| Speed per port  | 20Mbps or 200Mbps (Full Duplex)                |                     |  |  |
| MAC Address   | 4K   |                     |  |  |
|   | Power  | Green               | Power is up.   |  |
| LED indicators  | LINK/ACT                                       | Green:              | On for connection detected;<br>Flashing for sending/<br>receiving data |  |
|   | SPD  | Green               | On for 100Mbps, off for 10Mbps   |  |
| Physical Dimension 273 x 161 x 45 ( mm) (Width x Depth x Height |  | h x Depth x Height) |  |  |
| Weight  | 1.2 Kg   |                     |  |  |
| Input power specifications                                      | AC 90~264V                                     |                     |  |  |
| <b>Power Consumption</b>  | 13W  |                     |  |  |
| Agency and Regulatory   | FCC Class B, CE mark                           |                     |  |  |
| Operating Temperature   | 0°C to 40°C                                    |                     |  |  |
| Operating Humidity  | 5~90% non-condensing                           |                     |  |  |
|   | <del>U</del>                                   |                     |  |  |